



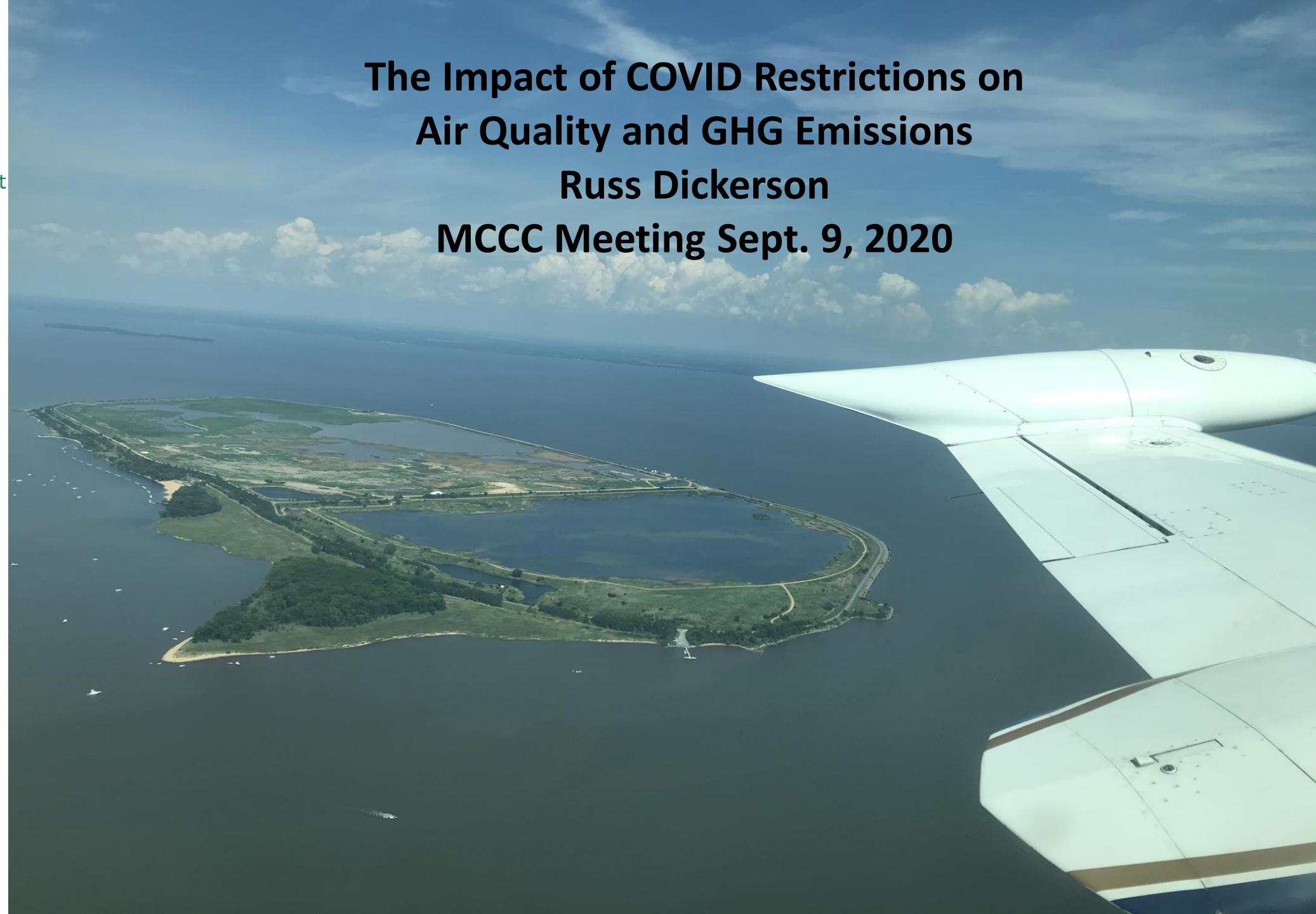
Maryland
Department of
the Environment



The Impact of COVID Restrictions on Air Quality and GHG Emissions

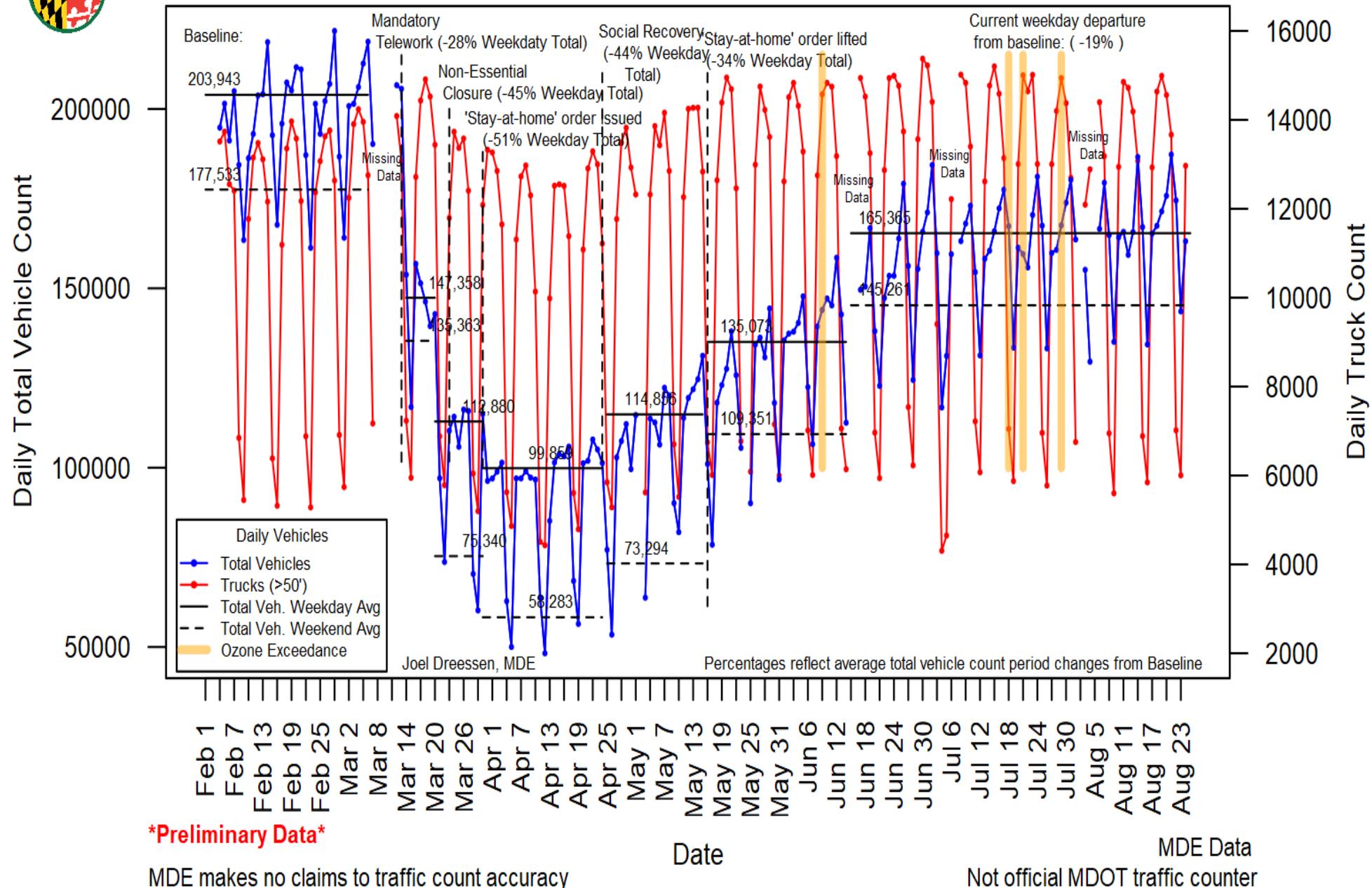
Russ Dickerson

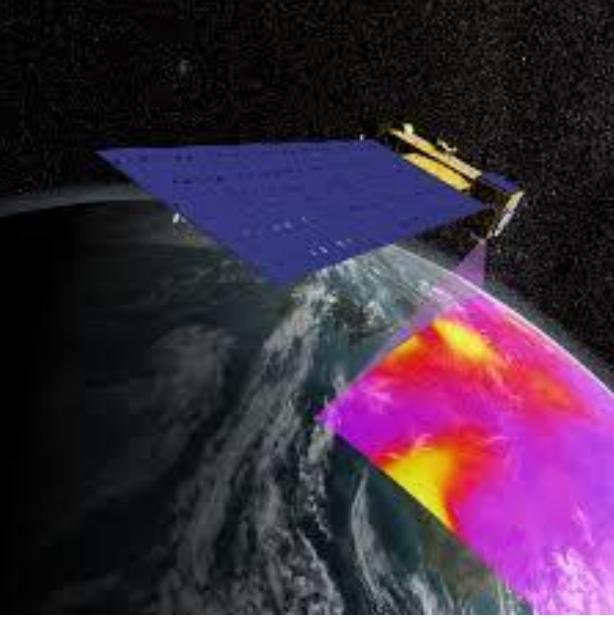
MCCC Meeting Sept. 9, 2020



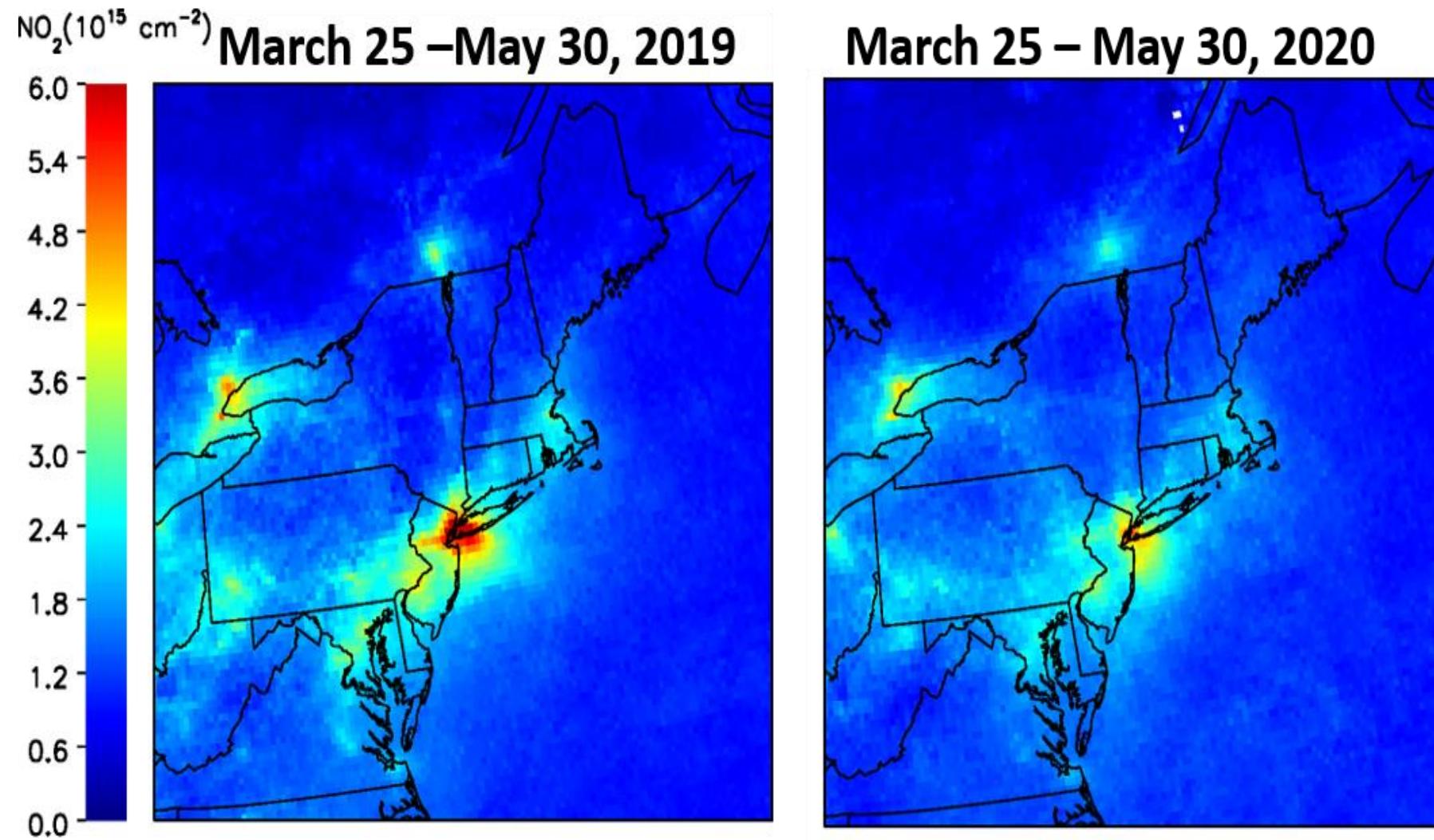


MDE Traffic Counter at I-95 Near-Road Site (Feb 4 - Aug 24, 2020)



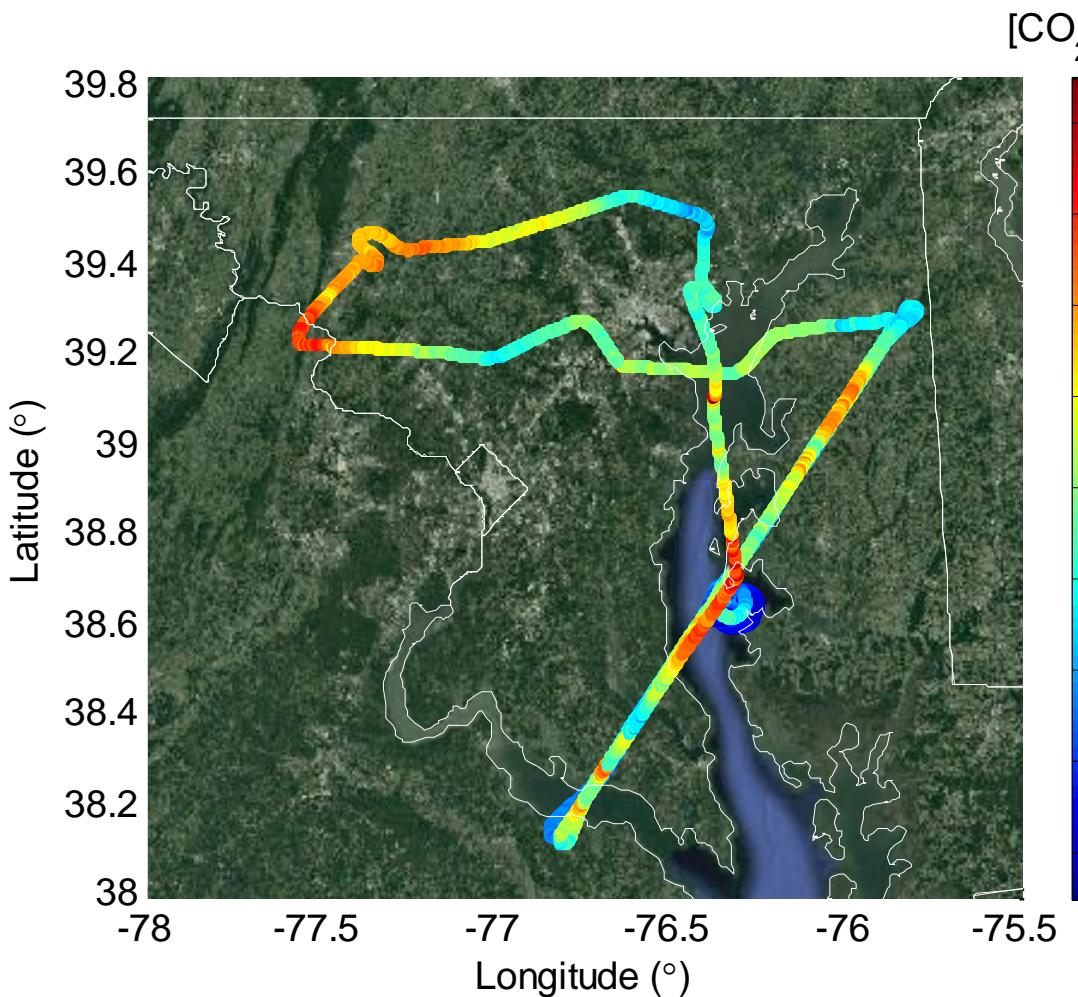


NASA's OMI Instrument
Thanks Tim Carty and GSFC

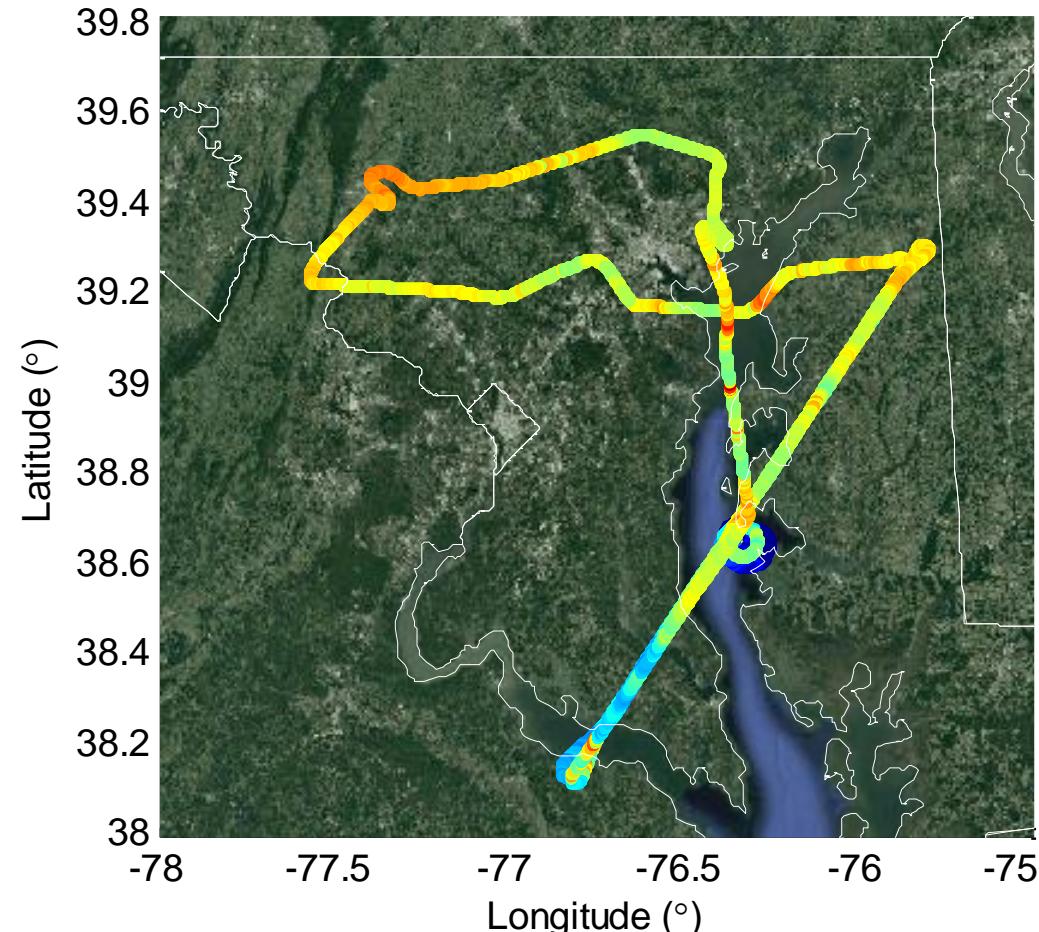
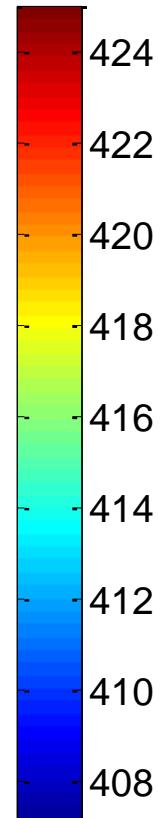




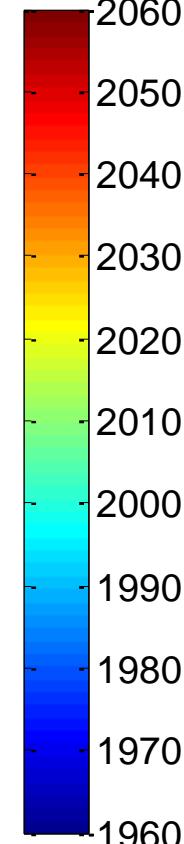
Night Flight CO₂ and CH₄ on Sept. 4, 2020



[CO₂] (ppm)



[CH₄] (ppb)



- High [CO₂] and [CH₄] observed downwind of Baltimore and Washington, DC
- Some influence from upwind CO₂ and CH₄ sources

Summary

Reduced traffic and energy use reduced emissions of Greenhouse gases and other pollutants.

CO (33±5%), CO₂, CH₄, NOx, BC....

Smog (ozone) events way below expectations for Baltimore, but not for NYC.

Exact reductions in GHGs is an ongoing effort.